BEFORE THE

Federal Communications Commission

WASHINGTON, D. C.

In the Matter of	)	
	)	
Review of the Pioneer's Preference Rules	)	ET Docket No. 93-266

REPLY COMMENTS OF PAGING NETWORK, INC.

Judith St. Ledger-Roty
Robert J. Aamoth
Reed Smith Shaw & McClay
1200 18th Street, N.W.
Washington, D.C. 20036
(202) 457-8656

Its Attorneys

November 22, 1993

SUMMARY

The FCC should repeal the pioneer's preference rules because competitive bidding promotes the FCC's goals far better than those rules and the pioneer's preference regime has not worked in practice. In addition, the FCC should not grandfather any existing requests or preferences. At a minimum, the FCC should not undermine the PCS market structure by giving parties licenses for free or at substantial discounts.

Under established precedent, removal of existing preferences does not constitute unlawful retroactive rulemaking. Preferences are eligiblility criteria which the FCC can repeal without violating the legal rights of existing preference holders. Mtel's unauthorized ex parte application for a narrowband PCS license should be ignored or returned until the necessary licensing rules are in place.

The FCC would undermine narrowband PCS competition by giving Mtel a free license. Mtel could use the free license to obtain two additional licenses at auction, representing 27% of nationwide narrowband PCS capacity, at a significant cost advantage over its rivals. At a minimum, the FCC should modify its rules to permit mutually-exclusive applications so that Mtel pays a license fee like other licensees.

The pioneer's preference rules should be repealed because they create disincentives for innovation, erect entry barriers through an expensive and time-consuming regulatory process, and result in so few preferences that no positive incentives are created. Comments indicate that parties waste

resources on the pioneer's preference process that ought to be used more productively.

Parties which support the pioneer's preference regime have distorted its original purpose into one which promotes the commercial self-interest of preference holders. The FCC adopted the rules so that the regulatory process would not stand between innovators and the marketplace. It did not adopt those rules to usurp the role of the marketplace in allocating resources.

All PCS industry participants have relied equally upon the pioneer's preference rules, and it would not be unfair to repeal those rules uniformly for all. Most parties would have expended the same effort on PCS technology and service to enter the PCS market absent the rules. Existing recipients have already benefitted in capital markets and would be able to obtain licenses, if they are deserving, through competitive bidding.

The FCC's established policies justify no grandfather rights for existing applicants or award recpients. Such rights would disserve the public interest by evading the competitive bidding process and permitting a sub-optimal use of spectrum.

The pioneer's preference rules have not assisted small businesses, rural telephone companies, or minority- and women-owned businesses to date. By contrast, the Budget Act and the FCC's proposed competitive bidding regime would involve mechanisms to promote diversity in the PCS industry through the participation of small businesses, rural telephone comapnies, and minority- and women-owned businesses.

TABLE OF CONTENTS

BEFORE THE

Federal Communications Commission

WASHINGTON, D. C.

In the Matter of	)	
	)	
Review of the Pioneer's Preference Rules	)	ET Docket No. 93-266
	)	

TO: The Commission

REPLY COMMENTS OF PAGING NETWORK, INC.

Paging Network, Inc. ("PageNet"), by its attorneys, hereby replies to the comments filed in response to the Notice of Proposed Rulemaking (FCC 93-477 [hereinafter "Notice"] released on October 21, 1993 in the above-captioned proceeding.

I. REPEALING THE PIONEER'S PREFERENCE RULES WITHOUT GRANDFATHERING EXISTING PREFERENCE REQUESTS OR AWARDS DOES NOT CONSTITUTE UNLAWFUL "RETROACTIVE" RULEMAKING

One recurrent misconception should be corrected at the outset. Several parties who hope to receive preferences or protect existing awards have suggested, usually without any legal support whatsoever, that it would be unlawful "retroactive" rulemaking for the Commission to repeal the pioneer's preference rules without grandfathering existing requests and awards.[1] In fact, precedent demonstrates that the Commission has manifest authority to repeal the pioneer's preference rules and then decline to issue any awards or licenses under those rules in the future without engaging in retroactive rulemaking. As Justice

---

[1] E.g., Comments of Advanced Cordless Technologies, Inc. at 2; Comments of Advanced Mobilecomm Technologies, Inc. and Digital Spread Spectrum Technologies, Inc. at 6; Comments of Associated Communications Corp. at 1; Comments of Cox Enterprises, Inc. at 7.

Scalia clarified in Bowen v. Georgetown University Hospital, retroactive rulemaking involves "altering the past legal consequences of past actions."[2] The Commission has consistently endorsed that interpretation.[3] The Commission would not alter any past legal consequences by repealing the pioneer's preference rules and declining to grant further preferences or licenses under the superseded rules.

As PageNet demonstrated in its comments (at 8-10), it was settled long ago that the Commission has the authority to modify or eliminate eligibility criteria to the detriment of pending applications. The Commission has repeatedly held that a pioneer's preference is nothing more than an eligibility criterion.[4] Indeed, a preference could not have greater weight without violating Section 309 of the Communications Act[5] under the rule of Ashbacker Radio Corp. v. FCC.[6] The parties who argue against the "retroactive" implementation of the repeal of the pioneer's preference rules are trying to create legal rights where none could exist.

---

2 488 U.S. 204, 219 (1988) (Scalia, J., concurring) (emphasis in original).

3 E.g., Amendment of Part 90 of the Commission's Rules, 8 FCC Rcd 3950, 3958 n.63 (1993). It is interesting to note that virtually every party which decries the "retroactive" repeal of the pioneer's preference rules has one or more specific actions which they desire the Commission to take in the future based upon those rules.

4 E.g., Establishment of Procedures to Provide a Preference, 8 FCC Rcd 1659, 1659-60 (1993) (Further Reconsideration Order).

5 47 U.S.C. § 309.

6 326 U.S. 327 (1945).

With respect to Mtel, it does not have a license and it did not even have a pending application on file when the Commission issued the Notice. Indeed, Mtel's rush to file an ex parte narrowband PCS application one week later -- before adoption of licensing rules and in violation of the Commission's policy against headstarts for parties receiving preferences -- was a transparent attempt to create legal rights which might withstand repeal of the pioneer's preference rules while other parties had their backs turned. The Commission should return or ignore Mtel's renegade application to protect the integrity of its on-going proceedings to establish PCS rules, adopt a competitive bidding regime, and repeal the pioneer's preference rules.

It does not justify giving Mtel a free license if the Commission, as some have suggested, requires Mtel to use the technology for which it received a preference in providing service to customers. Such an approach does not alleviate the competitive harm caused by giving Mtel a free license. Moreover, Pagenet is dubious as to whether the mechanism exists to articulate such a condition clearly and to permit both the Commission and industry participants to monitor Mtel's activities to ensure compliance with such a condition.

II. THE COMMISSION SHOULD NOT PERMIT ANY PARTY TO RECEIVE A NARROWBAND PCS LICENSE FOR FREE

It is no coincidence that most parties who favor the grandfathering of existing requests or awards also believe that parties receiving awards should obtain a license for free. In the narrowband PCS industry it has become abundantly clear that

competitive bidding will require tens of millions of dollars to purchase a single license. Any party which receives a license for free will have a significant cost advantage over its rivals. Given what one party called the "unlimited upside" of a free license,[7] it is no surprise that parties are strongly pursuing every avenue to retain existing awards or preserve their hope of obtaining an award.

PageNet demonstrated in its comments (at 13-15) that it would undermine competition in the narrowband PCS industry for the Commission to give Mtel 9% of the nationwide PCS narrowband spectrum for free. Indeed, it is likely that Mtel would be able to leverage its one free license into successful bids at auction for two other licenses, thereby giving it 27% of the nationwide narrowband PCS spectrum at a significant cost advantage over other parties. This result would undermine the cost and market structure of the narrowband PCS industry, to say nothing of the depressing effect it would have on the value of the remaining licenses and the proceeds which the Commission could obtain for such licenses. No commenting party rebutted or even discussed seriously the economic and competitive consequences of giving licenses for free (or at substantial discounts) to award recipients.[8]

---

[7] See Comments of Omnipoint Communications, Inc. at 26.

[8] It is not true, as some parties have suggested, that award recipients have already spent substantially more money to develop their technologies and services than parties who did not receive awards. E.g., Comments of Corporate Technology Partners at 3; Comments of Omnipoint Communications, Inc. at

Continued on following page

Henry Geller has argued that the number of awards is so small (three out of 492 opportunities) that permitting award winners to retain their preferences would not undermine competition.[9] However, Geller did not take into account that there are only eleven nationwide narrowband PCS licenses and that a free pioneer's preference will permit Mtel to acquire three licenses representing 27% of the nationwide narrowband PCS capacity at a significant cost advantage over potential rivals.

At a minimum, if the Commission decides to retain the pioneer's preference rules, it must amend its policy of giving a dispositive preference to a recipient in favor of a policy which awards a non-dispositive preference and permits the filing of mutually-exclusive applications. Such a modified pioneer's preference regime would remove any doubt that the Commission is authorized under the Budget Act to require preference recipients to pay fees for their licenses based upon actual competitive bidding results. Another option, as PageNet noted in its comments (at 15 n.22), is for the Commission to narrow the scope of Mtel's preference to a single BTA or MTA.

III. THE PIONEER'S PREFERENCE RULES SHOULD BE REPEALED

A. The Rules Serve No Purpose

Several parties assert that while competitive bidding may be the most efficient licensing mechanism, the Commission

---

Continued from previous page

29. On the record, there is no apparent relationship between the amount of funds expended and the award of preferences.

9 See Comments of Henry Geller at 5.

should nevertheless retain the pioneer's preference rules to give innovators a strong incentive to endure the spectrum allocation and rulemaking process.[10] This position fails because the comments of PageNet and others, as well as the Commission's own experience, show that the pioneer's preference regime has not worked well or as the Commission anticipated. In its comments (at 4-8), PageNet demonstrated that the pioneer's preference regime has erected a daunting regulatory process which has required the Commission to make technical decisions for which it was neither designed nor equipped. In some cases, the process even creates disincentives for innovators. Given the statistical infrequency of preferences, there is no colorable argument that the system provides meaningful incentives for innovators to seek spectrum allocation and rules for new services. As Nextel Communications, Inc. recognized, the pioneer's preference rules have become a kind of lottery where the rewards are so great that all industry participants, as well as numerous speculators, feel compelled to spend substantial resources to buy a "ticket."[11]

The failure of the pioneer's preference regime is aptly illustrated by the comments of one of its proponents. CELSAT, Inc. stated that it "has expended a very large percentage of its limited resources in preparing, filing and prosecuting its pioneer's preference application."[12] It was not what the

---

10 E.g., Comments of American Personal Communications at 1.

11 See Comments of Nextel Communications, Inc. at 3.

12 See Comments of CELSAT, Inc. at 4.

Commission had in mind when it adopted the pioneer's preference regime that parties would spend so much of their limited resources on the regulatory process rather than on technological and service innovation. Certainly, the millions of dollars spent on the pioneer's preference process would have been better spent in developing useful services and participating in competitive bidding. The pioneer's preference regime does not create significant incentives for parties to invoke the Commission's allocation and rulemaking processes. The principal reason why parties invoke those processes is their hope to participate actively in the potentially lucrative markets for PCS and other new technologies.

B. The Commission Need Not Debate The Merits of Competitive Bidding Versus The Pioneer's Preference Regime

Among commenting parties, opinion is sharply divided whether competitive bidding ensures that the party obtaining the license will make the most valuable use of the spectrum from the standpoint of the public interest. PageNet believes that competitive bidding ensures that the party which values the spectrum most will obtain a license. Moreover, Congress adopted the Budget Act based upon that very thesis.[13] At the same time, PageNet believes that the Commission need not address that issue in this proceeding. The value and usefulness of competitive

---

[13] See House Report of the Committee on the Budget, Report 103-111, 103d Congress, 1st Sess., May 25, 1993, at 247-49.

bidding is directly raised in PP Docket No. 93-253, and the Commission should resolve it in that proceeding.[14]

The relevant question here is whether the Commission should repeal the pioneer's preference rules in a competitive bidding regime. PageNet strongly disagrees with those parties who argue that Congress implicitly favors the pioneer's preference rules. Congress said as plainly as it knows how that it was taking no position -- favorable or unfavorable -- on that question at this time.[15] It is a policy matter for the Commission to determine, plain and simple. PageNet agrees with the Notice (at ¶ 7) that competitive bidding achieves the same goals as the pioneer's preference rules far better than those rules themselves. The pioneer's preference rules are no longer needed and should be repealed.

C. The Parties Who Favor Retention of the Pioneer's Preference Rules Have Grossly Distorted the FCC's Original Intentions

The Commission's original purpose for the pioneer's preference regime has been distorted by the parties themselves over time, sometimes virtually beyond recognition. For example, several parties suggest that the rules were designed to "enable[] the innovator to test its own internal assessment of value in the marketplace by providing service under an awarded license."[16]

---

14 See Comments of Paging Network, Inc., PP Docket No. 93-253, filed Nov. 10, 1993.

15 See Notice at ¶ 9.

16 See Comments of the Appellant Parties at 5 (emphasis supplied).

Others assert that the rules were designed to provide the winners a benefit in the marketplace over unsuccessful pioneer's preference applicants and other potential competitors. For example, QUALCOMM Inc. complains that "competitive bidding will not make it easier for innovators to obtain financing."[17]

PageNet submits that it was never the intent of the Commission to usurp the role of the marketplace. The Commission did not intend to bestow upon award winners an entitlement to test their own internal value assessments in the marketplace, nor did the Commission seek to provide award recipients with benefits which the marketplace would not otherwise have delivered.[18] Rather, the Commission's original defining goal was to remove the regulatory process (in particular, the gauntlet of comparative hearings or lotteries) as much as possible from standing between innovators and the marketplace.[19] The Commission's goal was to prevent its processes from depriving innovators of capital financing they would otherwise have obtained in the market, not to assure them of financial support beyond what the markets would

---

17 See Comments of QUALCOMM Incorporated at 5.

18 In any event, while a preference assists an applicant in raising funds, the market does not base its investment decision solely upon the preference. Financial investors look at numerous additional factors, including, inter alia, the quality of the management, an assessment of competing services and technologies, and the degree to which there is perceived demand for the company's innovation at the price the company can provide that innovation to customers in the form of a commercial service.

19 See Establishment of Procedures to Provide a Preference to Applicants Proposing an Allocation for New Services, 5 FCC Rcd 2766, 2766 (¶2) (1990) (Notice of Proposed Rulemaking).

have delivered. Henry Geller, one of the original proponents of the pioneer's preference rules, has recognized that competitive bidding has removed the need which spurred adoption of the rules. It is time to give economic decisions back to the marketplace by implementing a competitive bidding regime and repealing the pioneer's preference rules.

The parties who favor retention of the pioneer's preference rules, as well as the grandfathering of existing requests and awards, are doing precisely what the Commission has warned against. They are claiming that preferences distinguish between successful and unsuccessful technologies, services, and business plans. In its First Report and Order on narrowband PCS, the Commission emphasized:

> "We wish to caution against misinterpreting the meaning of a pioneer's preference denial. Whether or not an applicant receives a preference is based upon the criteria specified in our rules that require demonstration of innovation and feasibility. Nor does grant of a preference guarantee success in the marketplace. Conversely, denial of a preference is not a negative judgement with regard to the propensity for success of the denied proposal."[20]

In short, it is a decision for the market whether a particular innovation merits capital investment. Despite the Commission's intention to the contrary, the proponents of pioneer's preferences are turning the system into one which promotes "innovation" for its own sake.

---

[20] See Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services, GEN Docket No. 90-314 & ET Docket No. 92-100, rel. July 23, 1993, at ¶ 80 (First Report and Order).

IV. UNDIFFERENTIATED CLAIMS OF RELIANCE UPON THE PIONEER'S PREFERENCE RULES DO NOT SUPPORT GRANDFATHER RIGHTS

As expected, every party who asks the Commission to grandfather its pioneer's preference request or award claims to have relied in one way or another upon the pioneer's preference regime. Some of these claims are obviously correct. All parties, including PageNet, who filed pioneer's preference requests and then participated in subsequent regulatory proceedings expended time and money in the regulatory process that they would not have expended otherwise. However, it is precisely because all serious PCS industry participants have a similar reliance interest that it is not unfair to repeal the rules uniformly for everyone.

Similarly, several parties have specified in detail the personal and business sacrifices which they have made in order to participate fully in the pioneer's preference regulatory process. Again, virtually every company which participated seriously in that process, including PageNet, has made similar personal and business sacrifices. It would work no unfair discrimination to repeal the rules uniformly for everyone. Moreover, those companies which developed better technologies, services and business plans through sacrifice and hard work will inevitably be in a better position to participate in the competitive bidding by themselves or with the financial backing of others.

Other reliance claims are facile if not disingenuous. To read many comments, one would reach the absurd conclusion that the PCS industry would not even exist today if the Commission had not motivated parties to develop PCS technology and service

through the pioneer's preference rules. For example, American Personal Communications claims that it entered the PCS business "in full reliance" upon the pioneer's preference rules.[21] Yet, by its own admission, the company entered the industry in 1989, and received financial backing from the Washington Post Company, before the Commission even proposed (much less adopted) its pioneer's preference rules.[22] Similarly, Corporate Technology Partners claims that "[a]ll" of its work in the PCS industry was undertaken in reliance upon the pioneer's preference rules.[23] Yet in those same comments, the company boasts about being an industry leader since 1988, two years before the pioneer's preference rules were proposed and three years before they were adopted.[24] It is a common litany in pioneer's preference requests for companies to trace their involvement in the PCS industry to years before the pioneer's preference rules were proposed. Clearly, the reliance claims of parties who credit the pioneer's preference rules for their involvement in the industry are the self-serving, post hoc inventions of applicants or their attorneys, and the Commission cannot take them seriously.

Moreover, the Commission should not ignore that parties who received tentative or definitive awards have already obtained benefits that will not be rescinded by repeal of the pioneer's

---

21 See Comments of American Personal Communications at 3.

22 Id. at 2-3.

23 See Comments of Corporate Technology Partners at 2.

24 Id. at 1-2.

preference rules. Those parties can use, and in many cases have used, their awards to obtain financial backing in the capital markets. Certainly, Mtel wasted no time in parlaying its award into capital investment.[25] Those benefits will continue even after the Commission repeals the pioneer's preference rules. As a result, parties with tentative or definitive awards will receive more benefits from their reliance upon the pioneer's preference rules than parties who made a similar investment in the process but did not receive an award.

Lastly, the Commission should reject the argument that award recipients have publicly disclosed their innovations and would be harmed by repeal of the pioneer's preference regime.[26] All parties, not just award recipients, made similar disclosures of their technologies and service plans, and each party did so knowing that the Commission might not grant it or anyone else a preference. Further, it is naive to believe that any party "gave away the store" by revealing all the significant details of its innovation in the regulatory process. The parties made the kind of disclosures that typically support requests for spectrum allocation and the establishment of rules for new services. In industry fora to develop PCS standards, parties have made significant disclosures as part of the process to develop one or more standards to ensure uniform deployment of compatible

---

25 See "Opposition of Mtel to Petitions for Reconsideration of Paging Network, Inc. and Pacific Bell," GEN Docket No. 90-314 & ET Docket No. 92-100, filed Oct. 25, 1993, at 3-4.

26 E.g., Comments of Rockwell International Corp. at 4.

products. There are few secrets in the PCS world, and those that exist typically are necessitated by the confidentiality surrounding patents.

In sum, the parties who participated in the pioneer's preference process have all invested similar resources and undertaken similar "reliance" upon the pioneer's preference regime. Further, those parties became involved in the PCS industry wholly apart from the pioneer's preference rules, and their work to date in developing technologies, services and business plans is what they would have done in the absence of the rules to bring their ideas to the marketplace. Therefore, the reliance claims of the parties should not drive the decision whether to repeal the rules or to grandfather existing requests or awards.

V. GRANDFATHERING EXISTING AWARDS OR REQUESTS IS CONTRARY TO THE PUBLIC INTEREST

No commenting party has sought to demonstrate that existing requests or awards should be retained under the Commission's established policies for granting grandfather rights. PageNet demonstrated in its comments (at 10) that no party qualifies under those policies for grandfather rights. While it is clear that certain parties will have disappointed expectations, none of them is providing a service which would be disrupted or even has a license to provide service yet. As a result, there is no public interest rationale for grandfathering existing requests and awards.

Several parties make the self-evident argument that existing requests and preferences should be retained if the Commission retains the pioneer's preference regime. However, none can demonstrate even one public interest reason for retaining the existing awards in the event the Commission adopts its proposal to repeal those rules. The reason is that the Commission adopted the rules to provide regulatory incentives for innovators to offset the disincentives created by the licensing process. If the Commission repeals those rules as unnecessary in a competitive bidding regime, there will be no such regulatory incentives, by definition, for future innovators. Allowing current award recipients to keep their preferences might benefit those particular parties, but they would not create any incentives of the type which spurred adoption of the pioneer's preference rules. Moreover, removing all preferences does not prevent any party from providing service, as all parties will have an equal opportunity to obtain licenses through competitive bidding.

Several parties are concerned that preference recipients might not be able to obtain licenses through competitive bidding. PageNet submits that, with the exception of designated entities whose licensing would promote other public interest objectives, any party which cannot obtain a license through competitive bidding does not deserve to have a license. To give a license to a party outside of the competitive bidding process would ensure a sub-optimal use of the frequencies. Indeed, given the built-in advantage that preference recipients already enjoy in capital markets by virtue of their awards, a recipient which cannot obtain

sufficient financial backing to obtain a license through competitive bidding must have a technology which, however "innovative" it might be, does not make the most valuable use of the available spectrum. If the Commission adopts its proposed competitive bidding regime, permitting existing award recipients to keep their preferences (whether for free or otherwise) would promote no public interest objective and in fact would disserve the public interest in ensuring that scarce spectrum is used most efficiently to provide service to the public.

VI. THE PIONEER'S PREFERENCE RULES ARE NOT NECESSARY TO ASSIST SMALL BUSINESSES, RURAL TELEPHONE COMPANIES OR BUSINESSES OWNED BY MINORITIES AND WOMEN

Several commenting parties perpetrate a myth that the pioneer's preference regime promotes the interest of small businesses, while competitive bidding would be dominated by "mega-billion dollar corporations."[27] Empirical evidence demonstrates that these parties have it backwards. The pioneer's preference process has been no treat for small business interests. Parties have been forced to expend enormous resources just to do battle in the regulatory arena, and small businesses have not fared well to date in the granting of tentative or definitive pioneer's preferences. While some small businesses have spent money to purchase their pioneer's preference "lottery ticket" and understandably desire to see the lottery held, those private interests should not be controlling.

---

[27] E.g., Comments of Advanced Cordless Technologies, Inc. at 3.

If the Commission's objective is to provide meaningful assistance to small businesses, rural telephone companies, and businesses owned by minorities and women, it would defeat rather than promote that goal to retain the pioneer's preference rules or grandfather existing requests and awards. Rather, the Commission should move forward in its active consideration of mechanisms within the competitive bidding regime to promote the public interest in having diverse business interests participate in new technology and service industries.

It is a red herring to focus upon the extent to which small businesses will require financial backing from others to compete in the auction process. It is a reality under either regime -- both pioneer's preference and competitive bidding -- that the larger players will be able to purchase entry into the market at one point or another.[28] Further, there will always be disappointed parties under either regime; most parties who seek preferences do not obtain them, and many parties will find themselves unable to obtain a license through competitive bidding. However, parties which have pioneered innovative and useful technology will get the degree of financial support from the

---

[28] PageNet disagrees with those who assert that large, unnamed corporations will seek a "free ride" by paying huge sums for PCS licenses even though they have not been involved in the pioneer's preference or PCS regulatory process to date. E.g., Comments of Satellite CD Radio, Inc. at 11. To the extent new companies wish to enter the PCS industry, the commercial and technological reality is that they must do so by joining with one or more companies which already have sufficient technological capability and expertise. The only "free ride" is that which parties hope to obtain by obtaining licenses for free in a potentially lucrative industry.

market to which they are entitled. There are no longer the regulatory delays and uncertainties associated with comparative hearings or lotteries; investors who perceive the applicant and its technology to be worthy of financial support will provide the necessary backing. What is important is that the Commission's regulatory processes will no longer be standing between the innovator and the marketplace.

Conclusion

For the foregoing reasons, PageNet submits that the Commission should repeal the pioneer's preference rules and decline to grandfather existing preferences.

Respectfully submitted,

PAGING NETWORK, INC.

By: 

Judith St. Ledger-Roty
Robert J. Aamoth
Reed Smith Shaw & McClay
1200 18th Street, N.W.
Washington, D.C. 20036
(202) 457-8656

November 22, 1993

Its Attorneys

CERTIFICATE OF SERVICE

I, Danita Boonchaisri, hereby certify that I have caused a copy of the foregoing "Reply Comments of Paging Network, Inc." to be served on this 22nd day of November, 1993, by U.S. mail, first class postage prepaid, upon the following:

Frank Michael Panek
Ameritech
2000 W. Ameritech Center Drive
Room 4H84
Hoffman Estates, IL 60196-1025

Richard E. Wiley
Michael Yourshaw
Carl R. Frank
Wiley, Rein & Fielding
1776 K Stret, N.W.
Washington, D.C. 20006

Doris S. Freedman
Bary Pineles
Office of Advocacy
United States Small Business Administration
409 3rd Street, S.W.
Washington, D.C. 20554

Linda C. Sadler
Manager, Governmental Affairs
Rockwell International Corp.
1745 Jefferson Davis Highway
Arlington, VA 22202

Lawrence E. Phillips
Unterberg Harris
65 East 55th Street
New York, NY 10022

Veronica M. Ahern
Albert Shuldiner
Nixon, Hargrave, Devans & Doyle
One Thomas Circle, N.W.
Suite 800
Washington, D.C. 20005

James L. Bradley
United Native American
Telecommunications, Inc.
1604 Sandy Lane
Burlington, Washington 98233-3400

Stephen Curtin
President
Personal Communications Network Services of New York
17 Battery Place, Suite 1200
New York, NY 10004-1256

Norman P. Leventhal
Stephen D. Baruch
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, D.C. 20006

Stephen G. Kraskin
Charles D. Cosson
Kraskin & Associates
2120 L Street, N.W., Suite 810
Washington, D.C. 20037

James D. Ellis
Paula J. Fulks
Southwestern Bell Corporation
175 E. Houston, Room 1218
San Antonio, TX 78205

Phillip L. Spector
Susan E. Ryan
Paul, Weiss, Rifkind, Wharton & Garrison
1615 L Street, N.W., Suite 1300
Washington, D.C. 20036

James P. Tuthill
Betsy S. Granger
Theresa L. Cabral
140 New Montgomery St., Room 1529
San Francisco, CA 94105

James L. Wurtz
1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

Mark J. Tauber
Nora E. Garrote
Emilio W. Cividanes
Mark J. O'Connor
Piper & Marbury
1200 19th Street, N.W.
Washington, D.C. 20036

Edward R. Wholl
Jacqueline E. Holmes Nethersole
Nynex Corporation
120 Bloomingdale Road
White Plains, NY 10605

Robert S. Foosaner
Lawrence R. Krevor
Nextel Communications, Inc.
601 13th Street, N.W.
Suite 1110 South
Washington, D.C. 20005

Philip L. Malet
Steptoe & Johnson
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036

Barry Lambergman
Fletcher Heald & Hildreth
1300 North 17th Street
11th Floor
Rosslyn, VA 22209

Michael D. Kennedy
Director, Regulatory Relations
Motorola Inc.
1350 I Street, N.W., Suite 400
Washington, D.C. 20005

Michael B. Gordon
Montgomery Securities
600 Montgomery Street
San Francisco, CA 94111

Rodney L. Joyce
Ginsburg, Feldman and Bress
1250 Connecticut Avenue, N.W.
Washington, D.C. 20036

Henry Geller
Suite 800
1750 K Street, N.W.
Washington, D.C. 20006

Richard McKenna, HQE03J36
GTE Service Corporation
P.O. Box 152092
Irving, TX 75015-2092

Gail L. Polivy
1850 M Street, N.W.
Suite 1200
Washington, D.C. 20036

David A. Reams
President and General Counsel
Grand Broadcasting Corporation
P.O. Box 502
Perrysburg, Ohio 43552

W. Theodore Pierson, Jr.
Pierson & Tuttle
1200 19th Street, N.W.
Suite 607
Washington, D.C. 20036

Douglas J. Minster
4400 East West Highway, Suite 930
Bethesda, MD 20814

Werner K. Hartenberger
Laura H. Phillips
Dow, Lohnes & Albertson
1255 23rd Street, N.W., Suite 500
Washington, D.C. 20037

John D. Lockton
Managing Partner
Corporate Technology Partners
100 S. Ellsworth Avenue
9th Floor
San Mateo, CA 94401

Thomas J. Casey
Simone Wu
Skadden, Arps, Slate, Meagher & Flom
1440 New York Avenue, N.W.
Washington, D.C. 20005

Victor J. Toth
2719 Soapstone Drive
Reston, VA 22091

Charles D. Ferris
James A. Kirkland
Kecia Boney
Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, PC
701 Pennsylvania Avenue, N.W.
Suite 900
Washington, D.C. 20004

William B. Barfield
Jim O. Llewellyn
1155 Peachtree Street, N.E.
Atlanta, GA 30367-6000

L. Andrew Tollin
Michael Deuel Sullivan
Wilkinson, Barker, Knauer & Quinn
1735 New York Avenue, N.W.
Washington, D.C. 20006

Charles P. Featherstun
David G. Richards
1133 21st Street, N.W.
Washington, D.C. 20036

Walter H. Sonnenfeldt
Walter Sonnenfeldt & Assoc.
4904 Ertter Drive
Rockville, MD 20852

Stephen G. Kraskin
Sylvia Lesse
Caressa D. Bennet
Charles D. Cosson
Kraskin & Associates
2120 L Street, N.W., Suite 810
Washington, D.C. 20037

Jonathan D. Blake
Kurt A. Wimmer
Ronald J. Krotoszynski, Jr.
Covington & Burling
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044

Robert B. Kelly
Douglas L. Povich
Kelly, Hunter, Mow & Povich, PC
1133 Connecticut Avenue, N.W.
Washington, D.C. 20036

Gene A. Bechtel
Bechtel & Cole, Chartered
Suite 250
1901 L Street, N.W.
Washington, D.C. 20036

Michael R. Gardner, P.C.
1150 Connecticut Avenue, N.W.
Suite 710
Washington, D.C. 20036

Randy Coleman */
Office of Commissioner Duggan
Federal Communications Commission
1919 M Street, N.W.
Room 832/Mail Stop 0104
Washington, D.C. 20554